Poa billardierei

COMMON NAME
sand tussock, hinarepe

SYNONYMS
Festuca littoralis Labill.; Schedonorus littoralis (Labill.) P.Beauv.; Triodia billardierei Spreng.; Poa billardierei (Spreng.)St.-Yves; Schedonorus billardiereanus Nees; Arundo triodioides Trin.; Schedonorus littoralis var. alpha minor Hook.f.; Austrofestuca littoralis (Labill.) E.B.Alexev.

FAMILY
Poaceae

AUTHORITY
Poa billardierei (Spreng.)St.-Yves

FLORA CATEGORY
Vascular – Native

ENDEMIC TAXON
No

ENDEMIC GENUS
No

ENDEMIC FAMILY
No

STRUCTURAL CLASS
Grasses

NVS CODE
POABIL

CHROMOSOME NUMBER
2n = 28

CURRENT CONSERVATION STATUS
2017 | At Risk – Declining | Qualifiers: PD, RR, SO

PREVIOUS CONSERVATION STATUSES
2012 | At Risk – Declining | Qualifiers: SO
2009 | At Risk – Declining | Qualifiers: SO
2004 | Gradual Decline

DISTRIBUTION
North Island, South Island, Chatham Island (apparently absent from Chatham Island now despite being formerly abundant). Also found in temperate Australia.

HABITAT
Coastal dunes; sandy and rocky places near the shore, especially foredunes and dune hollows.

DETAILED DESCRIPTION
Yellow-green tussocks up to about 70 cm tall. **Leaves** fine, rolled, somewhat drooping (coarser than silver tussock), initially green, often fading at tips to silver, and drying to golden-straw colour. **Seed-heads** no longer than leaves; seeds relatively large, barley-like, leaving a characteristic zig-zag look to the remaining head when fallen.

Austrofestuca littoralis. Photographer: Geoff Walls, Licence: CC BY-NC.

Photo of inflorsecence. Photographer: Barbara Mitcalfe, Licence: CC BY-NC.

MANAAKI WHENUA ONLINE INTERACTIVE KEY

Key to the grasses of New Zealand

SIMILAR TAXA

Poa billardierei could be confused with *Poa chathamica* which has blue-green or grass-green flat leaves and an open seed head which overtops the foliage. It could also be confused with *Ammophila arenaria* (marram grass) which has similar foliage but large cat'stail-like seed heads that overtop the foliage. *Ammophila arenaria* is often confused with *P. billardierei* because they grow in the same habitat.

FLOWERING

Early summer

FRUITING

Mid to late summer

LIFE CYCLE

Florets are wind dispersed (Thorsen et al., 2009).

PROPAGATION TECHNIQUE

Collect seed in mid to late summer-autumn (early January in Wellington). Use fresh seed, sow in free-draining seed-raising mix (50:50 peat:sand), cover lightly with sieved river sand. It should germinate within 2 months. Grow on in open position where they will not be waterlogged. When growing by division collect matrial in autumn (after flowering has finished) or spring (before new growth appears). Use vigorous pieces from outside of plant and do not make divisions too small. Water regularly until established and new growth appears. Plant out in well-drained soil in open situation.

THREATS

Mammalian grazing and browsing (palatable to sheep, cattle, goats and horses). Competition from marram grass. Coastal development and use of vehicles. The combined impact of browsing and competition from marram grass is believed to have caused the loss of the species from the Chatham Islands.

ETYMOLOGY

poa: Meadow grass
billardierei: Named after Jacques Houttou de Labillardiere (1755-1834), 19th century French botanist who described several New Zealand plants

NOTES ON TAXONOMY

Until 2009 *Poa billardierei* was treated in Australasia as part of the segregate genus *Austrofestuca* Tzvelev. Soreng et al. (2009) reinstated the name *Poa billardierei* for this species after demonstrating that it and the allied Australian endemic *Austrofestuca pubinervis* (Vickery) B.K.Simon (now *Poa pubinervis* Vickery) were nested within *Poa* where they form their own section (Sect. Austrofestuca (Tzvelev) Soreng, L.J.Gillespie & S.W.L.Jacobs). The other two Australian endemic species of *Austrofestuca* (*A. eriopoda* (Vickery) S.W.L.Jacobs and *A. hookeriana* (F.Muell. ex Hook.f.) S.W.L.Jacobs are now placed in the reinstated *Hookerochloa*.

ATTRIBUTION

Fact Sheet prepared for NZPCN by P.J. de Lange 2 September 2003.

REFERENCES AND FURTHER READING

Cameron EK. 1991. *Austrofestuca* an extinct addition to the Waitakere Flora. *Auckland Botanical Society Journal 46*: 20.

Mitcalfe B, Horne C. 2002. Rediscovery of a nationally rare tussock in Makara Foreshore Reserve, Owhariu Bay, Wellington. *Wellington Botanical Society Bulletin 48*: 23–24.

Soreng RJ, Gillespie LJ, Jacobs SWL. 2009. *Saxipoa* and *Sylvipoa* – two new genera and a new classification for Australian *Poa* (Poaceae: Poinae). *Australian Systematic Botany 22*: 401-412.

Stanley, R. 2001. Sand tussock *Austrofestuca littoralis* update on the Auckland populations. *Auckland Botanical Society Journal 56*: 21–22.

Thorsen MJ, Dickinson KJM, Seddon PJ. 2009. Seed dispersal systems in the New Zealand flora. *Perspectives in Plant Ecology, Evolution and Systematics 11*: 285–309.

NZPCN FACT SHEET CITATION

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MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/poa-billardierei/